

REMARKS

In response to the Office Action mailed April 13, 2009, the new Assignee (i.e., Nuance Communications, Inc.) respectfully requests reconsideration. Claims 1-7, 9-15, and 18-23 were previously pending in this application. By this amendment, claims 1, 9, and 18-23 have been amended. As a result claims 1-7, 9-15, and 18-23 are pending for examination, of which claims 1, 9, and 18 are independent. No new matter has been added.

I. Rejections Under 35 U.S.C. §101

The Office Action rejects claims 9-15 under 35 U.S.C. §101 for purportedly being directed to non-statutory subject matter. Although the Assignee respectfully disagrees with these rejections, the Assignee has amended claim 9 to address the Examiner's concerns. In particular, claim 9 has been amended to recite "at least one processor programmed to implement a rare sequence detector..." Accordingly, claims 9-15 recite patent-eligible subject matter because the claims are directed to a "machine" authorized by 35 U.S.C. §101. The Assignee respectfully requests that the rejection of claims 9-15 under 35 U.S.C. §101 be withdrawn.

II. Rejections under 35 U.S.C. §103

The Office Action rejects claims 1-3, 9-11, 18, and 19 (including independent claims 1, 9, and 18) under 35 U.S.C. §103 as purportedly being obvious over U.S. Patent Publication 2002/0184030 ("Brittan") in view of U.S. Patent No.: 5,652,828 ("Silverman"). The Assignee respectfully traverses these rejections.

A. Overview of Embodiments

When a long passage is processed by a conventional text-to-speech (TTS) synthesis, the output can be characterized by some sections of great clarity, with other sections being more difficult to understand due to poor synthesis (Specification, page 3, lines 5-12). Because a listener of the synthesized speech has to struggle to decipher words in these difficult sections, the listener easily becomes fatigued (Specification, page 3, lines 12-15). Applicant has appreciated that the intelligibility of synthesized speech may be improved by detecting uncommon words in a text that

may be difficult to synthesize, and inserting pauses in the output of the synthesized speech of the uncommon words (e.g., before, after, and/or during) to offset the uncommon words from their surrounding speech and/or to lengthen the duration of the uncommon words (Specification, page 3, lines 22-26).

The foregoing summary is provided to assist the Examiner in appreciating various aspects of embodiments of the invention. However, this summary may not apply to each of the independent claims, and the language of the independent claims may differ in material respects from the summary provided above. Thus, the Assignee respectfully requests that careful consideration be given to the language of each of the independent claims and that each be addressed on its own merits, without relying on the summary provided above. In this respect, the Assignee does not rely on the summary provided above to distinguish any of the claims over the prior art. Rather, the Assignee relies only upon the arguments provided below.

B. The Combination of Brittan and Silverman Fails To Disclose All Limitations of Each of Independent Claims 1, 9, and 18

Each of independent claims 1, 9, and 18, as amended, includes a limitation that recites, “inserting at least one third pause within the output of the synthesized speech of the uncommon word to increase the duration of the uncommon word by pronouncing the uncommon word in at least two pronounced portions separated by the at least one third pause.” Support for this amendment may be found at least at page 8, lines 19-22 of Applicants’ specification. Neither Brittan nor Silverman discloses or suggests the above-quoted limitation.

The Office Action concedes that Brittan does not explicitly disclose inserting a pause within the output of the synthesized word, but asserts that Silverman discloses inserting a pause within the output of a synthesized word, inherently increasing the duration of the word (Office Action, page 4). Although Assignee does not dispute that the system of Silverman can reproduce a spelling of a word, wherein groups of the individual letters of the word, when reproduced, are separated by pauses (Silverman, col. 12, lines 53-58), Assignee respectfully disagrees that Silverman discloses inserting at least one third pause within the output of the synthesized speech of the uncommon word to increase the duration of the uncommon word by

pronouncing the uncommon word in at least two pronounced portions separated by the at least one third pause.

In Silverman, individual units of a word are reproduced as the individual letters that make up the word. For example, the word “Silverman” may be reproduced as “S-I-L, V-E-R, M-A-N,” where the reproduction of each of the groups of letters is separated by a slight pause (Silverman, col. 12, lines 54-58). That is, the pauses in Silverman separate a **spelling** of a word and not a **pronunciation** of the word. Each of claims 1, 9, and 18 recites inserting at least one third pause within the synthesized speech of the uncommon word to increase the duration of the uncommon word by pronouncing the uncommon word in at least two pronounced portions separated by the at least one third pause. Silverman fails to disclose pronouncing an uncommon word in at least two pronounced portions, as the groups of letters in a word that are separated by pauses, and are reproduced by the system of Silverman, are not pronounced portions of a word. The Random House Unabridged Dictionary defines “pronunciation” as “the act or result of producing the **sounds of speech**, including articulation, stress, and intonation, often with reference to some standard of correctness or acceptability (emphasis added).” In contrast, as would be readily understood by one of ordinary skill in the art, the letters of a word are an orthographic representation (i.e., a spelling) of the word which may not correspond to the word’s pronunciation.

In view of the foregoing, each of claims 1, 9, and 18 patentably distinguishes over the combination of Brittan and Silverman and is in allowable condition. Claims 2-7, claims 10-15, and claims 19-23 depend from claims 1, 9, and 18, respectively, and each is allowable for at least the same reasons. The Assignee respectfully requests that the rejections under 35 U.S.C. §103 be withdrawn.

III. General Comments on Dependent Claims

Since each of the dependent claims depends from a base claim that is believed to be in condition for allowance, for the sake of brevity, the Assignee believes that it is unnecessary at this time to argue the further distinguishing features of the dependent claims. However, the Assignee does not necessarily concur with the interpretation of the dependent claims as set forth in the Office

Action, nor does the Assignee concur that the basis for rejection of any of the dependent claims is proper. Therefore, the Assignee reserves the right to specifically address the further patentability of the dependent claims in the future.

CONCLUSION

A Notice of Allowance is respectfully requested. The Examiner is requested to call the undersigned at the telephone number listed below if this communication does not place the case in condition for allowance to discuss any outstanding issues relating to the allowability of the application.

If this response is not considered timely filed and if a request for an extension of time is otherwise absent, Assignee hereby requests any necessary extension of time. If there is a fee occasioned by this response, including an extension fee, the Director is hereby authorized to charge any deficiency or credit any overpayment in the fees filed, asserted to be filed or which should have been filed herewith to our Deposit Account No. 23/2825, under Docket No. N0484.70764US00

Dated:

Respectfully submitted,

By



Daniel T. Wehner, Reg. No. 63,480
Richard F. Giunta, Reg. No. 36, 149
WOLF, GREENFIELD & SACKS, P.C.
Federal Reserve Plaza
600 Atlantic Avenue
Boston, Massachusetts 02210-2206
617.646.8000